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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/198,590	11/23/1998	SUNIL KUMAR CHANDRUPATLA	CISCO-0610	2698

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EXAMINER
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NGUYEN, NGA B

ART UNIT	PAPER NUMBER
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3692

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/198,590	<b>Applicant(s)</b> CHANDRUPATLA ET AL.	
	<b>Examiner</b> Nga B. Nguyen	<b>Art Unit</b> 3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13,15,16,18,23 and 36-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13,15,16,18,23 and 36-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/13/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is the answer to the RCE filed on November 13, 2006, which paper has been placed of record in the file.
2. Claims 1-13, 15, 16, 18, 23, and 36-49 are pending in this application.

### ***Response to Arguments/Amendment***

3. Applicant's arguments with respect to claims 1-13, 15, 16, 18, 23, and 36-49 have been considered but are moot in view of new ground of rejection.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-13, 15, 16, 18, 23, and 36-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawyer, U.S. Patent No. 5,828,737, in view of Saari, U.S. Patent No. 6,338,046.

Regarding to claim 1, Sawyer discloses a method for accounting for network usage comprising:

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obtaining accounting start-stop event data from an accounting server (column 5, lines 16-17; column 6, lines 45-47; figure 4; call start, call over; the processing device 42 associated with billing center 44 keeps connect/disconnect events);

obtaining network flow data independent from the accounting start-stop event data from a router within a network through an intermediary netflow collector, the network flow data including data regarding the number and type of packets utilized by user (column 3, lines 61-63; column 4, lines 51-67; the bandwidth data (i.e., amount of data packets transferred over the network) is collected by the a bandwidth use monitoring device (BUMD) 40); and

correlating the accounting start-stop event data and the network flow data into a subscriber specific call detail record unique to the user by matching the accounting start-stop event data associated with the user with the network flow data associated with the user (column 4, line 59-column 5, line 55; the proper connect/disconnect information is combined with its bandwidth information to determine a charging amount to be billed for each call, and is sent to the billing center to generate a bill for the usage, "subscriber specific call detail record" is nothing more the user's usage record to generate the bill).

Sawyer does not disclose accounting start-stop event data is obtained from two or more accounting servers via an information bus, wherein the information bus contains the accounting start-stop event data published by the two or more accounting servers; and network flow data is obtained from two or more routers. However, Saari discloses "accounting start-stop event data is obtain from two or more accounting servers via an information bus, wherein the information bus contains the accounting

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start-stop event data published by the two or more accounting servers; and network flow data is obtained from two or more routers." See Saari figures 2-3, column 4, line 43-column 5, line 67 and column 6, line 50-column 7, line 25, "accounting start-stop event data is obtain from two or more accounting servers via an information bus" (two or more nodes 24a, 24b, 24c, 24d, include Timer 39 for obtaining the duration of time of the connection), "wherein the information bus contains the accounting start-stop event data published by the two or more accounting servers" (the nodes transmit the connection cost information to the network billing system 40), "network flow data is obtained from two or more routers" (the connection information 38 includes traffic parameters, connection type, number of bytes of data transferred, etc., is obtained from two or more billing unit 34a, 34b, 34c, 34d). Moreover, Saari also discloses the accounting start-stop event data is published by the two or more accounting servers (see figures 2-3 and column 5, lines 47-55, the charging information is transmitted to the external billing system 40). It is note that the term "publish" is defines as "to make data available so that it may be read by another person or computer program" (see "The New Penguin dictionary of Computing" by Dick Pountain, "publish", submitted by the applicant). Thus, in Saari, the nodes 24a, 24b make charging information available to the external billing system 40, or the nodes 24a, 24b publish charging information to the external billing system 40). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify Sawyer's to adopt the teaching of Saari above, for the purpose of enabling the account information to be received, computed, and transmitted from/to multiple servers, thus allows the system to track the user's

connection information when the user visits different information sources over the network.

Regarding to claim 2, Sawyer discloses wherein the obtaining accounting start-stop event data further comprises: parsing the accounting start-sop event data from the accounting server on a prescribed time interval; and publishing the accounting start-stop event data on an information bus (column 5, lines 16-17; column 6, lines 45-47; figure 4; call start, call over; the processing device 42 associated with billing center 44 keeps connect/disconnect events).

Regarding to claims 3-4, Sawyer discloses wherein the obtaining accounting start-stop event data further comprises: collecting the accounting start-stop event data at a target device that subscribes to the accounting start-stop event data (column 5, lines 15-16 and column 6, lines 7-60; the connect/disconnect events is collected by the processing device 42 associated with the billing center 44).

Regarding to claim 5, Sawyer discloses wherein the obtaining network flow data further comprises: aggregating the network flow data at the intermediary netflow collector according to a service provider defined aggregation scheme (column 4, lines 50-67; the bandwidth data is collected by the BUMD 40).

Regarding to claim 6, Sawyer discloses wherein aggregating the network flow data further comprises: basing aggregation of the network flow data on a specified time period (column 6, lines 7-60).

Regarding to claims 7-8, Sawyer does not disclose basing aggregation of the network flow data on the Internet Protocol Layer 3 source address and the Internet

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Protocol Layer 4 destination address. However, basing aggregation of the network flow data on the Internet Protocol Layer 3 source address and the Internet Protocol Layer 4 destination address is well-known in the art of data communication using Internet Protocol. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to include the feature above with Sawyer's for the purpose of applying the measurements of bandwidth data on the Internet Protocol Layer 3 source address and the Internet Protocol Layer 4 destination address.

Regarding to claims 9 and 11, Sawyer discloses wherein the obtaining network flow data further comprises: filtering the network flow data at the network flow collector according to a service provider defined filtration scheme (column 4, lines 57-59 and column 5, lines 12-15; the measurements of bandwidth data may be made by the BUMD 40 on either or both the reverse and/or the forward portions of the communications link 18).

Regarding to claim 10, Sawyer discloses wherein the obtaining network flow data further comprises: collecting the network flow data from a router and forwarding the network flow data to the network flow collector; aggregating the network flow data according to a defined aggregation scheme; parsing the network flow data from the network flow collector (column 4, lines 51-67; the measurements of bandwidth data may be made by the BUMD 40 on either or both the reverse and/or the forward portions of the communications link 18; the BUMD 40 and processing device 42 function as a bandwidth meter 46 measuring the total amount of bandwidth used for each communication).

Regarding to claim 12, Sawyer does not disclose wherein correlating and accounting start-stop event data and the network flow data further comprises: reformatting the call detail record to meet post-correlated applications. However, reformatting the call detail record to meet a compatible software application is well-known in the art. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to include the feature above with Sawyer's for the billing purpose.

Regarding to claim 13, Sawyer discloses a method for accounting for network usage comprising:

parsing accounting start-stop event data from an accounting server on a prescribed time interval (column 5, lines 16-17; column 6, lines 45-47; figure 4; call start, call over; the processing device 42 associated with billing center 44 keeps connect/disconnect events);

collecting network flow data independent from the accounting start-stop event data from a router within a network through an intermediary netflow collector, the network flow data including data regarding the number and type of packets utilized by user (column 3, lines 61-63; column 4, lines 51-67; the bandwidth data (i.e., amount of data packets transferred over the network) is collected by the a bandwidth user monitoring device (UBMD) 40);

aggregating the network flow data according to a prescribed aggregation scheme (column 4, lines 57-60);



parsing the network flow data from the network flow collector (column 4, lines 60-67);

publishing the network flow data on an information bus (column 5, lines 10-15);

collecting the accounting start-stop event data and network flow data at a target device that subscribed to the accounting start-stop event data and the network flow data (column 5, lines 29-55; the connect/disconnect events and bandwidth data are collected by the processing device 42 associated with the billing center 44); and

correlating the accounting start-stop event data and the network flow data into a subscriber specific call detail record unique to the user by matching the accounting start-stop event data associated with the user with the network flow data associated with the user (column 4, line 59-column 5, line 55; the proper connect/disconnect information is combined with its bandwidth information to determine a charging amount to be billed for each call, and is sent to the billing center to generate a bill for the usage, "subscriber specific call detail record" is nothing more the user's usage record to generate the bill).

Sawyer does not disclose accounting start-stop event data is obtained from two or more accounting servers via an information bus, wherein the information bus contains the accounting start-stop event data published by the two or more accounting servers; and network flow data is obtained from two or more routers, publishing the accounting start-stop event data on an information bus. However, Saari discloses "accounting start-stop event data is obtain from two or more accounting servers via an information bus, wherein the information bus contains the accounting start-stop event data published by the two or more accounting servers; and network flow data is

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obtained from two or more routers.” See Saari figures 2-3, column 4, line 43-column 5, line 67 and column 6, line 50-column 7, line 25, “accounting start-stop event data is obtain from two or more accounting servers via an information bus” (two or more nodes 24a, 24b, 24c, 24d, include Timer 39 for obtaining the duration of time of the connection), “wherein the information bus contains the accounting start-stop event data published by the two or more accounting servers” (the nodes transmit the connection cost information to the network billing system 40), “network flow data is obtained from two or more routers” (the connection information 38 includes traffic parameters, connection type, number of bytes of data transferred, etc., is obtained from two or more billing unit 34a, 34b, 34c, 34d). Moreover, Saari also discloses the accounting start-stop event data is published by the two or more accounting servers (see figures 2-3 and column 5, lines 47-55, the charging information is transmitted to the external billing system 40). It is note that the term “publish” is defines as “to make data available so that it may be read by another person or computer program” (see “The New Penguin dictionary of Computing” by Dick Pountain, “publish”, submitted by the applicant). Thus, in Saari, the nodes 24a, 24b make charging information available to the external billing system 40, or the nodes 24a, 24b publish charging information to the external billing system 40). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify Sawyer’s to adopt the teaching of Saari above, for the purpose of enabling the account information to be received, computed, and transmitted from/to multiple servers, thus allows the system to track the user’s

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connection information when the user visits different information sources over the network.

Claims 15, 16, 18, 36-49 are written in means that parallel the limitations found in claims 1-13 above, therefore, are rejected by the same rationale.

Claim 23 is written in computer software that parallel the limitations found in claim 1 above, therefore, is rejected by the same rationale.

### ***Conclusion***

6. Claims **1-13, 15, 16, 18, 23, and 36-49** are rejected.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (571) 272-6796. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on (571) 272-6777.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3600.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

C/o Technology Center 3600

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Washington, DC 20231

Or faxed to:

(571) 273-8300 (for formal communication intended for entry),

or

(571) 273-0325 (for informal or draft communication, please label

"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Knox building, 501 Dulany  
Street, Alexandria, VA, First Floor (Receptionist).



NGA NGUYEN  
PRIMARY EXAMINER

January 5, 2007